Lab Safety and Metric Quiz Chem 112 Name:_____

/18 Period: V1

1. Write the word True or False for the following statements.	
True	1. If you burn yourself, immediately run cold water over the burned area and inform your teacher.
False	2. If you cut yourself, rinse the cut with cold water. after.
False	3. If the Bunsen burner doesn't appear to be working properly, look down the barrel of the burner to see if the flame is coming up the barrel part way.
True	4. Safety glasses are to be worn at all times in the laboratory.
True	5. Most fire extinguishers in schools are class ABC fire extinguishers.
False	6. Class A fire extinguishers are used for radioactive substances.
True	7. Corrosive substances such as acids and bases may be washed down the drain, but should be properly diluted.
False	8. DO NOT eat, or drink in the laboratory. Chewing gum or candy is acceptable.
False	9. The proper technique for smelling a substance is to breathe in carefully as you hold the container near your nose.
False	10. Only taste substances that you have been instructed to taste in the laboratory.

1. T
2. F.
3 E
4 T
5 T
6 F
7 T
8 F
9 F
10 F

/10

2. Do the following metric conversions. Be sure to show some work for questions that are worth more than one point.

a. 4.89 nL=_____L /1

$4.89\ nL \times \frac{1\ L}{10^{9}\ nL} = 4.89 \times 10^{-9}\ nL$

b. 3.3×10^{8} km=_____dm /2

$3.3 \times 10^{8}\ km \times \frac{10^{3}\ m}{1\ km} \times \frac{10\ dm}{1\ m}$

$= 3.3 \times 10^{12}\ dm$

c. 56 mmol =_____kmol /2

$56\ mmol \times \frac{1\ mol}{10^{3}\ mmol} \times \frac{1\ kmol}{10^{3}\ mol}$

$= 5.6 \times 10^{-5}\ kmol$

d. 2.2×10^{-20} µg =_____g /1

$2.2 \times 10^{-20}\ \mu g \times \frac{1\ g}{10^{6}\ \mu g} = 2.2 \times 10^{-26}\ g$

e. 49 mm=_____cm /2

$49\ mm \times \frac{1\ m}{10^{3}\ mm} \times \frac{10^{2}\ cm}{1\ m} = \frac{4.9 \times 10^{1}}{10^{1}}$

$= 4.9$